

## 2003 ANNUAL ANALYSIS OF CEDAR & TOLT WATER SUPPLIES

Samples Collected: May 20, 2003 (unless otherwise noted)

Cedar Distribution = South of the ship canal & lower elevations North of ship canal.

Tolt Distribution = Higher elevations North of the ship canal.

| Water Quality<br>Parameter             | State Dept. of Health<br>Maximum Contaminant Level | CEDAR       | TOLT        | Minimum<br>Reporting<br>Level |
|--|--|-------------|-------------|-------------------------------|
| Primary Standards *                    | MCL  |             |             |                               |
| Antimony                               | 6 ug/L   | ND          | ND          | 3.0                           |
| Arsenic                                | 50 ug/L  | ND          | ND          | 1.0                           |
| Asbestos \$                            | 7 million fibers/L (>10um long)                    | ND          | ND          | 0.2                           |
| Barium                                 | 2000 ug/L  | ND          | ND          | 5.0                           |
| Beryllium                              | 4 ug/L   | ND          | ND          | 2.0                           |
| Cadmium                                | 5 ug/L   | ND          | ND          | 0.2                           |
| Cyanide                                | 200 ug/L   | ND          | ND          | 10.0                          |
| Chromium                               | 100 ug/L   | ND          | ND          | 1.0                           |
| Fluoride                               | 4 mg/L   | 0.86        | 0.96        | 0.10                          |
| Haloacetic Acids, Total ~              | 60 ug/L  | 24.9        | 25.0        | 5.0                           |
| Nickel                                 | 100 ug/L   | ND          | ND          | 10.0                          |
| Mercury                                | 2 ug/L   | ND          | ND          | 0.1                           |
| Nitrate-Nitrogen                       | 10 mg/L  | 0.046       | 0.128       | 0.010                         |
| Nitrite-Nitrogen                       | 1 mg/L   | ND          | ND          | 0.002                         |
| Selenium                               | 50 ug/L  | ND          | ND          | 3.0                           |
| Thallium                               | 2 ug/L   | ND          | ND          | 2.0                           |
| Trihalomethanes, Total~                | 80 ug/L  | 28.2        | 32.2        | 0.5                           |
| Turbidity                              | 5 NTU for Cedar/ 0.30 NTU for Tolt                 | 0.49        | 0.15        | 0.05                          |
| Secondary Standards **                 | SMCL   |             |             |                               |
| Aluminum                               | 50 - 200 ug/L                                      | 72.3        | 26.5        | 3.0                           |
| Chloride                               | 250 mg/L   | 3.71        | 2.83        | 0.5                           |
| Color                                  | 15 std. units                                      | ND          | ND          | 5.0                           |
| Copper ^                               | 1000 ug/L  | ND          | ND          | 1.0                           |
| Fluoride                               | 2 mg/L   | 0.86        | 0.96        | 0.10                          |
| Iron                                   | 0.3 mg/L   | 0.027       | 0.015       | 0.004                         |
| Manganese                              | 50 ug/L  | 3           | ND          | 1.0                           |
| pH, range ++ ^                         | 6.5 - 8.5 pH units                                 | 7.79 - 8.47 | 8.09 - 8.65 | NA                            |
| Silver                                 | 100 ug/L   | ND          | ND          | 1.0                           |
| Solids, Total Dissolved                | 500 mg/L   | 47.5        | 37.0        | 5.0                           |
| Specific Conductance                   | 700 umhos/cm                                       | 67.8        | 57.8        | 5.0                           |
| Sulfate                                | 250 mg/L   | 1.32        | 2.12        | 1.0                           |
| Zinc                                   | 5 mg/L   | ND          | ND          | 0.02                          |
| Other Parameters ^                     | Units  |             |             |                               |
| Alkalinity, Total (as CaCO3)           | mg/L   | 22.3        | 15.4        | 2.0                           |
| Calcium, (as CaCO3)                    | mg/L   | 25.6        | 23.2        | 2.0                           |
| Hardness, (as CaCO3)                   | mg/L   | 30.1        | 24.6        | 2.0                           |
| Hardness, (as CaCO3)                   | grains/gal.  | 1.74        | 1.42        | 0.1                           |
| Magnesium                              | mg/L   | 1.08        | 0.34        | 0.02                          |
| Oxygen, Dissolved                      | mg/L   | 11.2        | 15.9        | 0.5                           |
| Potassium                              | mg/L   | 0.26        | 0.13        | 0.020                         |
| Silica, Reactive                       | mg/L   | 7.90        | 5.40        | 1.0                           |
| Sodium                                 | mg/L   | 2.31        | 1.12        | 0.02                          |
| Temperature, annual range              | deg. C.  | 5 - 20      | 5 - 20      | NA                            |
| Total Organic Carbon (treatment plant) | mg/L   | 1.05        | 1.11        | 0.20                          |
| Lead, Source water                     | ug/L   | ND          | ND          | 1.0                           |
|  | Action Level                                       |             |             |                               |
| Lead, Residential Survey @             | 15 ug/L  | 11.1        | 30.9        | 1.0                           |
| Copper, Residential Survey @           | 1300 ug/L  | 263         | 969         | 1.0                           |

*Primary and Secondary Standards were measured at the Intake to the distribution system after treatment.*

\* Health stds.: Supplier subject to public notification.

++ January-May 2003, 10-90th percentile

\*\* Aesthetic stds.: Supplier not subject to public notification.

\$ Test results 12/15/95 - analysis not required in 2003

~ Average of the last 4 quarters testing, through 5/03.

^ Representative of the Seattle distribution system.

@ Measured at 90th percentile of overnight standing residential samples from homes with copper pipes and lead solder, 1997. New samples will be collected in late 2003 and again in early 2004.

1 ppm = 1 mg/L = 1000 ug/L

ND = Not Detected at or above the Minimum Reporting Level